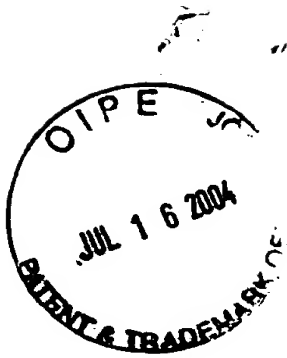


DFW



Docket No.: 206580US0



COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

ATTORNEYS AT LAW

RE: Application Serial No.: 09/842,161  
Applicants: Hidetaka IWAI, et al.  
Filing Date: April 26, 2001  
For: EMULSION COSMETIC  
Group Art Unit: 1617  
Examiner: Gina Yu

SIR:

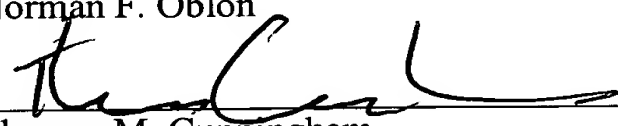
Attached hereto for filing are the following papers:

**Letter; Declaration Under 37 C.F.R. 1.132**

Our check in the amount of \$0.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

  
\_\_\_\_\_  
Thomas M. Cunningham  
Registration No. 45,394

Customer Number

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(703) 413-2220 (fax)

DOCKET NO: 206580US0



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
HIDETAKA IWAI, ET AL. : EXAMINER: GINA YU  
SERIAL NO: 09/842,161 :  
FILED: APRIL 26, 2001 : GROUP ART UNIT: 1617  
FOR: EMULSION COSMETIC :

LETTER

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Prior to examination of the Supplemental Amendment filed June 2, 2004, please enter the enclosed Declaration under 37 C.F.R. 1.132. This declaration describes the same experimental data shown in the declaration filed December 19, 2002. However, the exact chemical names of the compounds described in the prior declaration are now provided. For example, in the Table the prior declaration used the generic terminology “alkyl glutamate sodium”, but the revised declaration uses the more exact “lauryl glutamate sodium”. This declaration further clarifies the previous declaration and does not make any changes to the specification; therefore there is no issue of new matter. Accordingly, entry and consideration of the attached declaration is now respectfully requested.

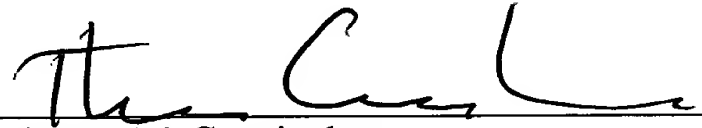
The reported experimental data show that selection of a surface active agent with a dynamic surface tension of 57 mN/m or less provides a superior emulsion with high transparency, compared to surface active agents with a dynamic surface tension about 57 mN/m. There is no suggestion or reasonable expectation of success in the prior art that

Application No. 09/842,161  
Letter.

highly transparent emulsions are produced when (1) the ratio of the oily component to hydrophilic surface active agent is more than 10:1 by (2) selection of a surface active agent with a dynamic surface tension of 57 mN/m or less. Favorable consideration is now respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon



Thomas M. Cunningham  
Attorney of Record  
Registration No. 45,394

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(OSMMN 06/04)

DOCKET NO.: 206580US



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF:

HIDETAKA IWAI ET AL.

: EXAMINER: YU, G.

SERIAL NO.: 09/842,161

:

FILED: APRIL 26, 2001

: GROUP ART UNIT: 1617

FOR: EMULSION COSMETIC

:

DECLARATION UNDER 37 C.F.R. §1.132

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22314

SIR:

Now comes Hidetaka Iwai who deposes and states:

1. That I am a graduate of Waseda University, and received a Master's degree in the year 1989.
2. That I have been employed by Kao Corporation for 14 years as a researcher in the field of skin care cosmetics.
3. That I understand the English language or, at least, that the contents of the Declaration were made clear to me prior to executing the same.
4. The effects of a representative number surface active agents having a dynamic surface tension of less than 57 mN/m on oil-in-water emulsion transparency were compared to similar emulsions produced using surface active agents having a dynamic surface tension above 57 mN/m.

BEST AVAILABLE COPY

5. Table 1 shows the various surface active agents that were compared and their dynamic surface tension values.

Table 1

surface active agent	dynamic surface tension
lauroyl glutamate sodium	49.6 mN/m
POE lauryl ether	51.6 mN/m
N-lauroyl methyl taurine sodium	53.3 mN/m
lauryl Castor oil	58.0 mN/m
sorbitane mono laurylate	58.4 mN/m

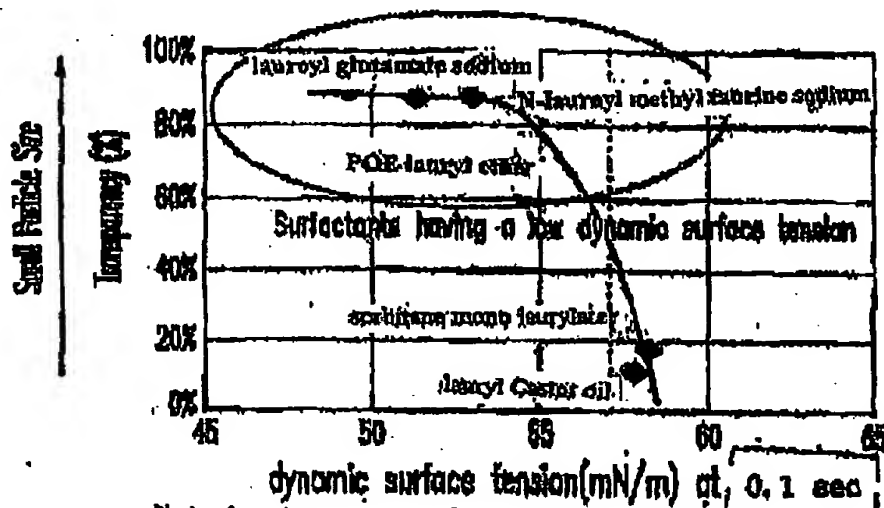
6. Process conditions. Oil-in-water emulsions were produced by ten machine (DeBEE2000) passes at a shear rate of  $5 \times 10^7$  m/s at 18°C. The components of the emulsions are shown below:

surfactant	0.5%
dimethyl polysiloxane (5 mm <sup>2</sup> /s)	5.10%
86% glycerol	33.60%
dipropylene glycol	2.00%
water	58.80%.

The surface tension of the oil phase was 19.3 mN/m and the surface tension of the water phase was 56.7 mN/m.

7. Table 2 shows the degree of transparency of the resulting oil-in-water emulsions. As shown, surface active agents having a dynamic surface tension of less than 57 mN/m produced highly transparent emulsions, while surface active agents with dynamic surface tension values of greater than 57 mN/m produced emulsions with much less transparency.

Table 2



8. One with skill in the art would recognize that highly transparent emulsions are desirable and useful, for instance, for the production of lotions, hair treatments, and other cosmetic products.


9. Surface active agents used by JP63-126542. The dynamic surface tension values (mN/m) of surface active agents described by JP63-126542 were measured using a Type BP-D3 automatic dynamic surface tension meter (produced by Kyowa Interface Science Co., LTD.) designed to measure the dynamic surface tension of a 0.2% aqueous solution of surface

active agent at 25°C in 100 msec according to bubble pressure method. These values are shown in the Table below.

Surface active agent	Dynamic surface tension	Described by JP63-126542 on:
Potassium lauryl sulfate (Potassium dodecyl sulfate)	58.4 mN/m	Pages 7-10 (Examples 1-27)
POE (2): Triethanolamine lauryl sulfate (Triethanolamine dodecyl sulfate)	66.4 mN/m	Page 4, lines 23
Sodium N-myristoyl-N-methyl taurine	60.6 mN/m	Page 4, lines 24-25
POE (8): Sodium Oleyl ether phosphate	67.1 mN/m	Page 4, lines 25-26
Myristyl trimethylammonium chloride	59.2 mN/m	Page 11 (Example 30)
Cetyltrimethylammonium bromide	57.7 mN/m	Page 11 (Example 31)
Dicetyldimethylammonium bromide	65.7 mN/m	Page 12 (Example 32)

10. The undersigned petitioner declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

11. Further deponent saith not.

  
Signature

2004/06/22  
Date